

Remarks

The Applicant respectfully requests reconsideration and reexamination of the above-identified patent application, as amended. Claims 1, 5-10, and 13-16 are pending in this application upon entry of this Amendment. In this Amendment, the Applicant has amended claims 1, 5-10, and 13-16; and cancelled claims 2-4, 11-12, and 17-21. No claims have been added in this Amendment. Of the pending claims, claims 1 and 10 are independent claims.

Status of Withdrawn Claims

The Applicant has cancelled claims 17-21 which were withdrawn from consideration as being drawn to a non-elected invention.

Amended Independent Claims 1 and 10

Amended independent claim 1 recites a storage library having a frame and cells supported within the frame for holding media elements, the cells positioned within the frame to form a channel running up and down through the frame (see, for example, the Applicant's FIG. 1). The storage library includes a robotics module having a housing, a platform movably connected to the housing to move relative to the housing, and a picker supported on the platform (see, for example, the Applicant's FIGS. 1-8). The robotics module is mounted to the frame such that the housing is supported by the frame and the platform is positioned within the channel to move up and down through the channel as the platform moves relative to the housing (see, for example, the Applicant's FIG. 1). The platform is moved through the channel to move the picker through the channel and toward one of the cells for the picker to manipulate a media element held by the cell (see, for example, the Applicant's FIG. 1). The robotics module has a contained position in which the platform meets the housing such that the picker is contained between the housing and the platform (see, for example, the Applicant's FIG. 4). While in the contained position the robotics module is dismountable from the frame

to provide modular replacement and removal of the robotics module into and out of the frame (see, for example, the Applicant's FIG. 2).

Amended independent claim 10 generally recites the robotics module set forth in amended independent claim 1 for the library set forth in amended independent claim 10.

Claim Rejections - 35 U.S.C. § 112, 1st Paragraph

The Examiner rejected claims 1-16 under 35 U.S.C. § 112, 1st paragraph, as failing to comply with the enablement requirement. The Examiner posited the Applicant has only described the concept of housing a picker in a module that can be separately attached and detached from a storage library. The Examiner posited the Applicant has not disclosed the many structural features required to make that concept into an actual operational device. The Examiner posited, for example, the disclosure does not address issues related to the "free-hanging" picker (citing page 13, lines 11-12 of the Applicant's specification) such as the motions generated by movements of the hand assembly, movement between levels, etc.

The Applicant respectfully traverses. With reference to the Applicant's FIGS. 1-8 and the related specification disclosure, the Applicant has disclosed the structural features which the Examiner posited were lacking. For instance, the Applicant has disclosed a robotics module having a housing, a platform movably connected to the housing to move relative to the housing, and a picker supported on the platform (see, for example, page 9, line 26 through page 10, line 5; page 10, lines 24-30; page 11, line 16 through page 12, line 2; and page 12, line 28 through page 13, line 19 of the Applicant's specification). The Applicant has disclosed the platform is moved through the channel to move the picker through the channel and toward one of the cells for the picker to manipulate a media element held by the cell (see, for example, page 9, line 26 through page 10, line 5; page 10, lines 24-30; page 11, line 16 through page 12, line 2; and page 12, line 28 through page 13, line 19 of the Applicant's specification). The Applicant has disclosed the robotics module has a contained position in which the platform meets the housing such that the picker is contained between the housing and the platform (see,

for example, page 8, lines 13-23; page 9, line 26 through page 10, line 5; page 10, line 24 through page 11, line 9 of the Applicant's specification). The Applicant has disclosed while in the contained position the module is dismountable from the frame to provide modular replacement and removal of the module into and out of the frame (see, for example, page 8, lines 13-23; page 11, lines 1-9; and page 13, lines 11-19 of the Applicant's specification).

Further, the Applicant has disclosed how the picker has "z", "x", and "wrist direction" (i.e., rotatable) degrees of motion in order to move throughout the storage library toward given ones of the cells supported in the storage library (see, for example, page 11, line 16 through page 12, line 2; page 12, line 14 through page 13, line 10 of the Applicant's specification).

Further, the Applicant has disclosed how control and power signals are used and communicated to control the movement of the picker (see, for example, page 8, line 24 through page 9, line 9; page 10, lines 24-30; page 11, lines 10-16; page 11, line 24 through page 13, line 2 of the Applicant's specification).

Further, the Applicant has disclosed how the picker may have a reader to read labels of media elements and/or drives within the frame of the storage library and thereby indirectly know its location if the location of the media elements and/or drives are known (see, for example, page 10, lines 21-23 of the Applicant's specification).

Thus, the Applicant respectfully submits that the Applicant has described a concept of housing a picker in a module that can be separately attached and detached from a storage library and has disclosed the structural features required to make that concept into an actual operational device such that one skilled in the art to which the device pertains is enabled to make and/or use the device. Accordingly, the Applicant respectfully requests reconsideration and withdraw of the 35 U.S.C. § 112, 1st paragraph, claim rejections.

Claim Rejections - 35 U.S.C. § 112, 2nd Paragraph

The Examiner rejected claims 1-16 under 35 U.S.C. § 112, 2nd paragraph, as being indefinite. The Examiner posited the recitation that of the robot assembly “being containable within a module/housing” in claims 1 and 10 is indefinite. The Examiner posited the recitation that the module/housing be “removably mountable” in claims 1, 5-7, 10, and 13-15 is indefinite. The Applicant has amended the claims to address the Examiner’s 35 U.S.C. § 112, 2nd paragraph, concerns. Accordingly, the Applicant respectfully requests reconsideration and withdraw of the 35 U.S.C. § 112, 2nd paragraph, claim rejections.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 1-3, 5, 7-8, 10-11, 13, and 15-16 (including independent claims 1 and 10) under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,546,366 issued to Dang (“Dang”). Claims 2-3 and 11 have been cancelled. The Applicant respectfully submits amended independent claims 1 and 10 are patentable under 35 U.S.C. § 102(b) over Dang for the reasons set forth below.

1. Amended Independent Claim 1 and its Dependent Claims 5 and 7-8

The storage library set forth in amended independent claim 1 generally differs from Dang in that the storage library includes a robotics module having a housing, a platform movably connected to the housing to move relative to the housing, and a picker supported on the platform in which the robotics module is mounted to the frame of the storage library such that the housing is supported by the frame and the platform is positioned within a channel, running up and down through the frame and formed by cells positioned within the frame, to move up and down through the channel as the platform moves relative to the housing, whereby the picker is moved through the channel toward one of the cells to manipulate a media element held by the cell. The storage library set forth in amended independent claim 1 further differs from Dang in that the robotics module of the storage library has a contained position in which

the platform meets the housing such that the picker is contained between the housing and the platform, whereby while in the contained position the robotics module is dismountable from the frame in order to provide modular replacement and removal of the robotics module into and out of the frame. As such, the robotics module of the storage library set forth in amended independent claim 1 includes structural features (e.g., housing supported by the frame, platform movably connected to the housing, picker contained between the housing and the platform while in the contained position of the robotics module) for the removable mounting and dismounting of the robotics module from the frame of the storage library.

In contrast, the picker module of Dang (i.e., the structures shown in FIG. 3 including picker 38 and the non-shown top and bottom cross-frame pieces) does not have a contained position in which a platform of the picker module meets a housing of the picker module such that picker 38 is contained between the platform and the housing whereby the picker module is dismountable from the frame of a storage library while in the contained position. Further, the non-shown top and bottom cross-“frame” pieces, of which picker 38 is movably connected, are part of the frame of the storage library and are not dismountable from the frame as the claimed housing, of which the platform is movably connected.

In view of the foregoing amendments and remarks, amended independent claim 1 is patentable under 35 U.S.C. § 102(b) over Dang. Claims 5 and 7-8 depend from amended independent claim 1 and include the limitations therein. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 102(b) rejection to claims 1, 5, and 7-8.

2. Amended Independent Claim 10 and its Dependent Claims 13 and 15-16

The robotics module set forth in amended independent claim 10 generally differs from Dang in that the robotics module has a housing, a platform movably connected to the housing to move relative to the housing, and a picker supported on the platform in which the housing mounts to the frame of a storage library such that the platform is positioned within a

channel, running up and down through the frame and formed by cells positioned within the frame, to move up and down through the channel as the platform moves relative to the housing, whereby the picker is moved through the channel toward one of the cells to manipulate a media element held by the cell. The robotics module set forth in amended independent claim 10 further differs from Dang in that the robotics module has a contained position in which the platform meets the housing such that the picker is contained between the housing and the platform, whereby in the contained position the robotics module dismounts from the frame to provide modular replacement and removal of the robotics module into and out of the frame. As such, the robotics module set forth in amended independent claim 10 includes structural features (e.g., housing supported by the frame, platform movably connected to the housing, picker contained between the housing and the platform while in the contained position of the robotics module) for the removable mounting and dismounting of the robotics module from the frame of the storage library.

In contrast, the picker module of Dang (i.e., the structures shown in FIG. 3 including picker 38 and the non-shown top and bottom cross-frame pieces) does not have a contained position in which a platform of the picker module meets a housing of the picker module such that picker 38 is contained between the platform and the housing whereby the picker module is dismountable from the frame of a storage library while in the contained position. Further, the non-shown top and bottom cross-“frame” pieces, of which picker 38 is movably connected, are part of the frame of the storage library and are not dismountable from the frame as the claimed housing, of which the platform is movably connected.

In view of the foregoing amendments and remarks, amended independent claim 10 is patentable under 35 U.S.C. § 102(b) over Dang. Claims 13 and 15-16 depend from amended independent claim 10 and include the limitations therein. Accordingly, the Applicant respectfully requests reconsideration and withdraw of the 35 U.S.C. § 102(b) rejection of claims 10, 13, and 15-16.

Claim Rejections - 35 U.S.C. § 103

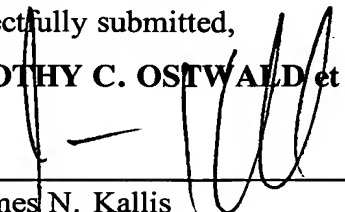
The Examiner rejected claims 4, 6, 12, and 14 under 35 U.S.C. § 103(a) as being unpatentable over Dang. Claims 4 and 12 have been cancelled. Claims 6 and 14 respectively depend from amended independent claims 1 and 10. Accordingly, the Applicant respectfully requests reconsideration and withdraw of the 35 U.S.C. § 103(a) claim rejections.

CONCLUSION

In summary, claims 1, 5-10, and 13-16 presented herein meet the substantive requirements for patentability. The case is in appropriate condition for allowance. Accordingly, such action is respectfully requested.

If a telephone or video conference would expedite allowance or resolve any further questions, such a conference is invited at the convenience of the Examiner.

Respectfully submitted,
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